

Periodic Table of Atomic Radii

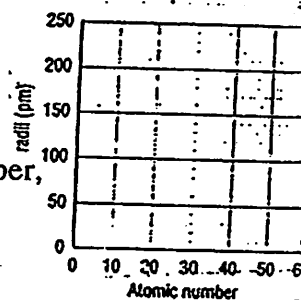
<div> <div> <div>H</div> <div>1</div> </div> <div> <div>Atomic Symbol</div> <div>C</div> <div>Atomic Number</div> <div>6</div> </div> <div> <div>Atomic Radius (pm)</div> <div>77</div> </div> </div>																																																																																																																																																																																																																																																											
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PURPOSE

To graph atomic radius versus atomic number for the representative elements in periods 2-5 and to examine the graph for periodic and group trends.

PROCEDURE

Use the information given in the above table to plot atomic radius versus atomic number, and then answer the following questions.



1. What happens on the graph each time the atomic number is from an atom located in group 1 of the periodic table? (specifically atomic #'s 3,11,17,37 and 55)
2. Are the general trends shown for periods 2,3,4 and 5 similar or different?
3. Describe and explain the shape of each period's portion of the graph. What happens to the atomic radii as you go across a period?
4. How do the radii for the atoms change as you go down a group? Explain.